

EXHIBIT 2

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

SONOS, INC.,)
)
)
Plaintiff,)
)
)
v.)
)
D&M HOLDINGS INC. d/b/a THE)
D+M GROUP, D&M HOLDINGS U.S.)
INC., and DENON ELECTRONICS)
(USA), LLC,)
)
Defendants.)

COURT'S FINAL JURY INSTRUCTIONS

I. Introduction

You have now heard all the evidence in this case and the arguments of the lawyers. The time has come for me to instruct you on the law that you are to apply.

The legal term for what I am going to give you is the jury charge, or the Court's instructions. These instructions will be a little lengthy, and they may be a little difficult to follow at times. That is because the law for this case is fairly complex. To help you, I have made copies of the instructions that you can use during your deliberations. I mention this so you won't feel that you have to take notes right now. In fact, I would suggest that you just listen to these instructions, without trying to write anything down.

When you return to the jury room, your job will be to consider the evidence you have heard and to decide what the facts are. As jurors, you are what we call the finders of the facts. My job as the judge is to explain to you the law that you will apply to the facts. You should not be concerned with the wisdom of the applicable law that I state to you. Also, please remember

that nothing I may have said or done during the course of the trial and nothing I say now is intended to suggest, or should be taken by you as suggesting, what I think your verdict should be.

1. Preponderance of the evidence / Clear and convincing evidence.

I am going to start by returning to the subject of the burden of proof, which we briefly discussed at the beginning of the case.

For some of the issues in this case, such as whether Denon infringes Sonos's patents, the burden of proof is the preponderance of the evidence. The preponderance of the evidence means that a party who is asserting a particular claim, such as Sonos saying that Denon infringes its patents, has the burden of persuading you that the evidence supporting that claim is more likely to be true than untrue. If the evidence does not persuade you that a party's claim is more likely to be true than untrue, that means the party with the burden of proof has failed to satisfy that burden. If that happens, you should find in favor of the other party on that particular claim.

As I said before trial, some issues, such as whether Sonos's patents are invalid, have a different burden of proof. For these issues, the burden of proof is clear and convincing evidence. Clear and convincing evidence means that a party who is asserting a particular claim, such as Denon saying that Sonos's patents are invalid, has the burden of leaving you with a clear conviction or belief that the evidence supports that party's claim or defense. That is a higher standard of proof than the preponderance of the evidence, which means it is harder to prove something by clear and convincing evidence than by a preponderance of the evidence.

2. Evidence in the case; credibility of witnesses.

As the finders of the facts, you are responsible for weighing the evidence in this case, including the testimony of the witnesses you have heard, the exhibits that have been introduced as evidence, and any facts that the parties have agreed are true, such as by stipulation. As a

reminder, the lawyers' statements and characterizations of the evidence are not evidence. While the opening and closing arguments may have been helpful to you, your decision should ultimately depend on your evaluation of the evidence.

As part of your job as jurors, you are entitled to weigh the testimony of the witnesses. This is a job well suited for jurors like yourselves who have heard and seen the witnesses. For example, if two witnesses offer testimony that is in conflict, you should use your common sense in deciding which witness you think is more believable. You can consider, for example, each witness's motive, state of mind, knowledge, and manner while on the witness stand. If there is a question as to the relative expertise of two witnesses, again, you should use your common sense to decide which witness you find more knowledgeable and more believable. You are entitled to give the testimony of each witness whatever weight you feel is appropriate. You may choose to believe or disbelieve any witness's testimony, either entirely or in part.

3. Expert witnesses.

Some of the witnesses have testified as expert witnesses because of their special knowledge about matters relevant to the case. The fact that a witness has testified as an expert does not mean that you must accept that witness's opinions as true. As with all other witnesses, it is up to you to decide whether you find the witness's testimony convincing.

4. Depositions – use as evidence.

During the trial, some of the testimony was presented not through a live witness, but through a deposition. As you saw, a deposition is a recording of the witness's sworn answers to questions that were asked by the lawyers before the trial. The deposition testimony that you heard at trial is entitled to the same consideration as any other evidence in the case, and you

should judge its credibility and weight the same as if the witness had been present and testified from the witness stand.

5. Questions to Decide.

I will now summarize the issues that you must decide and provide instructions to guide your deliberations. Sonos alleges that Denon's HEOS audio players and HEOS controller apps installed on devices and the use of those devices infringe certain claims of the three Sonos patents at issue in this case. In addition, Sonos alleges that Denon's infringement of the three patents was willful.

These three Sonos patents are:

U.S. Pat. No. 9,195,258, referred to as the '258 patent;

U.S. Pat. No. 7,571,014, referred to as the '014 patent; and

U.S. Pat. No. 8,588,949, referred to as the '949 patent.

I will refer to those patents as the Sonos patents.

Denon denies that it has infringed any claims of Sonos's patents. Denon also argues that the claims of those three patents that are in issue are invalid.

You must decide the following four issues, each of which must be decided separately:

First, whether Sonos has proved, by a preponderance of the evidence, that Denon has infringed any of the asserted claims of the Sonos patents.

Second, whether Sonos has proved, by a preponderance of the evidence, that Denon's infringement of any of the Sonos patents was willful.

Third, whether Denon has proved, by clear and convincing evidence, that any of the asserted claims of the Sonos patents that you find to have been infringed are invalid.

Fourth, if you find that the Sonos patents are both valid and infringed, what amount of damages Sonos has proved by a preponderance of the evidence.

II. Infringement

1. Patent infringement – generally.

First, as to infringement. Patent infringement occurs when a person makes, uses, sells, offers to sell, or imports a product that is covered by the patent and does so without the patent owner's permission.

How do we decide what is covered by the patent? For that, we look at the patent's claims. The claims are the numbered paragraphs at the end of the patent. The claims are important because it is the words of the claims that define what a patent covers. The figures and text in the rest of the patent provide a description of the invention or context for the claims, but it is the claims that define what the patent covers. The claims that you will be called upon to decide are claims 17, 21, and 24 of the '258 patent; claim 25 of the '014 patent; and claim 1 of the '949 patent. You don't have to keep those numbers in mind. They are listed in these instructions and will be listed for you on your verdict form.

When a device meets all of the requirements of a claim, the claim is said to "cover" that thing, or that the thing "falls within the scope" of the claim. In other words, a claim covers a device where each of the claim elements or limitations is present in that device. To find infringement, you must find that each and every one of the requirements of a particular claim are satisfied.

You will first need to understand what each claim covers in order to decide whether or not there is infringement of the claim and whether or not the claim is invalid. I have defined

several of the terms that are used in the claims. You are to apply those definitions when considering what the claims cover. The terms I have defined for you are as follows:

“clock time information”

The term “clock time information” means information representing a time value indicated by a device’s clock.

“comprising”

The term “comprising” means “including” or “containing.” A claim that uses the word “comprising” or “comprises” is not limited to products having only the claimed elements recited in the claim. To fall within the claim, a product has to have at least those elements, but the use of the term “comprising” means that the patent also covers products with extra features.

So, there can be infringement of a claim containing “comprising” language even if the accused product contains additional features beyond those claimed in the patent, so long as each of the claimed elements is present.

“configured to”

“when executed by the one or more processors”

“the processor executing the code in the memory to cause”

Some of the claims in the Sonos patents say that a device is “configured to” perform a certain function. One of the claims in the Sonos patents says that a device has instructions that “when executed” by one or more processors, certain functions occur. Another of the claims in the Sonos patents says that a device has a processor “executing the code in the memory” to perform certain functions.

These terms all mean that the device has software that makes it capable of performing the function or that it is otherwise “designed to perform” the function. So, there can be infringement

of claims including this language as long as a device that satisfies all of the other limitations of the claim has been installed with software that is capable of performing the claimed functions.

“independently clocked”

The term “independently clocked” means operating in accordance with their own respective clocks during synchronous playback.

“multimedia”

The term “multimedia” means any type of media that comprises audio (including audio alone).

“network interface”

The term “network interface” means the physical component of a device that provides an interconnection with a data network.

“playback timing information”

The term “playback timing information” means information indicating when the audio information/content is to be played back.

“player” / “playback device” / “zone player”

The term “player,” “playback device,” or “zone player” means a data network device configured to process and output audio.

* * *

Terms that I have not defined should be given their ordinary meaning.

2. Independent and Dependent Claims.

This case involves two types of patent claims: independent claims and dependent claims.

An “independent claim” sets forth all of the requirements that must be met in order to be covered by that claim. A “dependent claim” is a claim that refers to another claim for some of its

requirements. A dependent claim incorporates all of the requirements of the claims to which it refers and adds some additional requirements.

3. How to Determine Whether there is Infringement.

I will now instruct you on how to decide whether or not Denon has infringed the asserted claims of Sonos's patents.

United States patent law gives the owner of a U.S. patent the right to exclude others from making, using, selling, offering to sell, or importing something that is covered by one of the patent claims during the term of the patent. Infringement is assessed on a claim-by-claim basis. Therefore, it is possible for there to be infringement as to one claim but not as to another.

In order to prove infringement, Sonos must prove that the requirements of infringement are met by a preponderance of the evidence, which is to say that it is more likely than not that all of the requirements of infringement have been proved.

4. Direct Infringement.

There are three types of infringement at issue in this case. The first is called direct infringement. Sonos has alleged that Denon directly infringes the Sonos patents.

In order to prove direct infringement, Sonos must prove by a preponderance of the evidence, which again means by showing that it is more likely than not, that Denon made, used, sold, offered for sale, or imported into the United States a product that satisfies all of the requirements of at least one of the asserted claims and did so without the permission of Sonos during the time the Sonos patents were in force.

A product directly infringes a claim if the product includes each and every element of that claim. In order to find direct infringement, you must find that every element of the claim in

question was satisfied. You are to make a separate determination of direct infringement for each of the five asserted claims of the Sonos patents.

In doing so, you must compare the HEOS products with each claim of the Sonos patents to determine whether each and every one of the requirements of that claim are satisfied. When performing this comparison, you should be careful not to compare the accused HEOS products with Sonos's products or the descriptions in the Sonos patents. Only a comparison between the HEOS products and the actual claims of the Sonos patents is relevant to the question of whether Denon has infringed those patents.

Direct infringement does not require proof that the accused infringer intended to infringe the patent in question. Someone can directly infringe a patent without knowing that what they were doing constituted infringement.

5. Induced Infringement.

A second way to infringe a patent is referred to as induced infringement. Proof of induced infringement requires a showing by a preponderance of the evidence that the accused infringer intentionally induced a third party to directly infringe a patent, knowing that the third party's induced actions would, in fact, directly infringe the patent.

Intent to induce infringement can be shown if the accused infringer took steps to cause, urge, encourage, or aid the third party's acts. The required knowledge can be proved either by showing that the induced acts of the third party would result in direct infringement or that the accused infringer knew that there was a high probability that infringement would occur but took steps to avoid confirming that that would be true.

6. Contributory Infringement.

A third way to infringe a patent is referred to as contributory infringement. Proof of contributory infringement requires a showing by a preponderance of the evidence that the accused infringer contributed to the direct infringement of a patent by a third party.

Contributory infringement can be established if the evidence shows:

- (1) that the accused infringer sells or offers to sell in the United States a component of an infringing product;
- (2) that the component in question has no substantial non-infringing use;
- (3) that the component constitutes a material part of the invention;
- (4) that the accused infringer was aware of the patent and knew that the product satisfied a claim of the patent; and
- (5) that the product directly infringes the claim.

As to each claim, you must determine whether Sonos has proved by a preponderance of the evidence that Denon has infringed the claim under one of these three theories.

7. Willful Infringement.

If you find that Denon is liable for infringement of one or more claims of Sonos's patents, on one or more of the three theories I've just discussed, you must next decide whether Denon's infringement was willful. To find willfulness, you must find that Sonos has proved by a preponderance of the evidence that Denon acted despite a risk of infringement that was known or was so obvious that it should have been known, and that in so doing Denon engaged in egregious behavior that was malicious, deliberate, consciously wrongful, or in bad faith. In making that determination, you may consider factors such as whether Denon acted inconsistently with the standards of behavior for its industry; whether Denon actually copied or attempted to copy the

inventions covered by the Sonos's patents; and whether Denon failed to make a good-faith effort to avoid infringing Sonos's patents.

III. Validity

I will now instruct you on the rules you must follow in deciding whether or not Denon has proved that any asserted claims of the Sonos patents are invalid. Denon has the burden of proving invalidity by clear and convincing evidence, which leaves you with a clear conviction or belief that the evidence supports Denon's claim.

Denon contends that the asserted claims of Sonos's patents are invalid because they would have been obvious to a person skilled in the technology described in the patents. The construction of the claims of the Sonos patents that I read to you earlier apply equally for purposes of validity just as they do infringement.

1. Prior Art.

Under the patent laws a person is granted a patent only if the invention claimed in the patent is new and is not obvious in light of what came before. What came before, as you've heard repeatedly this week, is referred to as the "prior art."

Prior art may include items that were publicly known or that have been used or offered for sale, or references, such as publications or patents, that disclose the claimed invention or elements of the claimed invention. To be prior art, the item or reference must have been made, known, used, published, or patented either before what is called of the "priority date" of the patent, sometimes called the "effective filing date" of the patent. References that are dated after that date do not qualify as prior art to the patent.

The parties agree that the priority date for the '258 patent is April 1, 2004.

The parties agree that the priority date for the '014 patent is June 5, 2004.

The parties agree that the priority date for the '949 patent is June 5, 2004.

The importance of the priority date of the patent is that it tells you what components as prior art that can lead to the invalidity of the patent. So a reference that is dated after the priority date of a particular patent is not prior art to that patent.

2. Obviousness – In General.

Even though an invention may not have been identically disclosed or described before it was made by an inventor, in order to be patentable the invention must also not have been obvious to a person of ordinary skill in the field of technology of the patent at the time the invention was made. Denon may establish that a patent claim is invalid by showing, by clear and convincing evidence, that the claimed invention would have been obvious, at the time that the invention was made, to persons having ordinary skill in the art in the field of technology described in the patents at the time of the invention.

In determining whether a claimed invention is obvious, you must consider the level of skill of a person of ordinary skill in the field of technology of the patent at the time that the invention was made, the scope and content of the prior art, and any differences between the prior art and the claimed invention.

The term “person of ordinary skill in the art” is a term used frequently in patent law, and it has an important role in deciding whether an invention would have been obvious at the time it was invented. So what does it mean?

A person of ordinary skill in the art is a person of average education and training in a particular field, but who is aware of the relevant prior art in that field. The level of ordinary skill in the art often depends on the nature of the field of the invention. So, for example, if the invention is a way to generate additional energy in a nuclear power plant, the level of ordinary

skill in the art is likely to be significantly higher than if the invention is a new way to fold cardboard boxes to make them stronger.

Obviousness may be proved by considering more than one item of prior art, and considering these multiple prior art references in combination. For this purpose, you may consider whether there is anything that would have prompted a person of ordinary skill in the art to combine the elements or concepts in the prior art in the same way the invention does. But you also need to keep in mind that a patent claim that consists of several elements is not rendered obvious merely because each of the separate elements was known in the prior art. For example, you could say that a piano is really just a combination of wood, ivory, metal, and wires, but that does not mean that inventing the piano would be obvious if you just started with a pile of wood, some wire, some pieces of ivory, and a few chunks of metal.

3. Level of Ordinary Skill.

For the asserted patents here, a person of ordinary skill in the art is a person having a bachelor's degree in computer science, computer engineering, or electrical engineering, and approximately two to four years of professional experience in at least one of those fields, or an equivalent level of skill and knowledge.

4. Scope and Content of the Prior Art.

In considering whether the claimed invention was obvious, you must first determine the scope and content of the prior art.

The scope and content of prior art for deciding whether the invention was obvious includes at least prior art in the same field as the claimed invention. It also includes prior art from different fields that a person of ordinary skill in the art would have considered when trying to solve the problem that is addressed by the invention.

5. Obviousness – Considerations.

In determining whether the claimed invention would have been obvious, you may consider factors such as the following:

- (1) whether the claimed invention was more than the predictable result of using prior art elements according to their known functions;
- (2) whether the claimed invention provided more than an obvious solution to a known problem in the relevant field;
- (3) whether the prior art suggested the desirability of combining elements claimed in the invention or pointed away from combining elements in the claimed invention; and
- (4) whether there was a design need or market pressure to solve the problem addressed by the claimed invention.

Remember, in making the determination of obviousness, you are not to use hindsight; instead, you must consider only what was known at the time of the invention and consider the issue of obviousness from the perspective of a person of ordinary skill as of the priority date of the patent in question.

In making your assessment of whether a claimed invention would have been obvious or not, you should take into account any objective evidence that may shed light on the obviousness or non-obviousness of the claimed invention. In patent law, that type of evidence is generally referred to as “secondary considerations” of non-obviousness.

For example, the following secondary considerations, individually or collectively, may suggest that the claimed invention would not have been obvious:

- (1) The invention was commercially successful as a result of the merits of the

- claimed invention (rather than as the result of design needs or advertising or similar activities);
- (2) The invention satisfied a long-felt need;
 - (3) Others failed to make the invention;
 - (4) Others copied the invention;
 - (5) The invention achieved unexpected results;
 - (6) Others in the relevant industry, especially competitors, praised the invention;
 - (7) Others in the relevant industry, especially competitors, expressed doubt or skepticism that the invention would work for its intended purpose;
 - (8) Others in the relevant industry, especially competitors, expressed surprise or disbelief regarding the invention; and
 - (9) Others sought rights, such as licenses, to the patent from the patent holder.

In considering this kind of evidence, you should consider whether the secondary considerations were attributable to the claimed features of the invention as opposed to features already found in the prior art.

For each asserted claim, if you find that Denon has proved by clear and convincing evidence that the claim would have been obvious, you must find the claim invalid.

IV. Damages.

If you find that Denon infringed any valid claim of the Sonos patents, you must decide the amount of money to award to Sonos to compensate it for its injuries. I will now instruct you about the measure of damages. The legal term for that award of money is “damages,” and I will use that term from here on out. By instructing you on damages, I am not suggesting which party should win this case.

The damages you award must be adequate to compensate Sonos for the infringement. Sonos has the burden to establish the amount of its damages by a preponderance of the evidence. In other words, you should award only those damages that Sonos establishes that it more likely than not suffered. While Sonos is not required to prove the amount of its damages with mathematical precision, it must prove them with reasonable certainty. You may not award damages that are speculative, damages that are only possible, or damages that are based on guesswork.

The amount of any damages is to be calculated for a range of dates that is different for each of the patents. The date range for damages for each patent is:

- (1) For the '258 patent, from November 24, 2015, to December 31, 2016;
- (2) For the '949 patent, from November 5, 2015, to December 31, 2016; and
- (3) For the '014 patent, from March 2014 to December 22, 2014.

There are different types of damages that Sonos may be entitled to recover. In this case, Sonos seeks to recover a combination of lost profits and a reasonable royalty. Lost profits consist of any actual reduction in business profits Sonos suffered as a result of Denon's infringement. A reasonable royalty is defined as the money amount Sonos and Denon would have agreed upon as a fee for use of the invention at the time prior to when infringement began.

1. Lost Profits

Sonos seeks to recover lost profits for the share of Denon's sales that Sonos lost because of Denon's infringement of the Sonos patents. To recover lost profits, Sonos must show that but for Denon's infringement, Sonos would have made at least some of the sales that Denon made and would have earned profits on those sales. Sonos can prove entitlement to lost profits only if

the evidence shows that there was demand for the patented product and that Sonos had the capacity to meet that demand.

In determining the amount of lost profits to award, you should consider (1) the amount of sales that Denon could have made by selling a commercially viable non-infringing substitute product; and (2) the amount of Denon's remaining sales that Sonos would have made, given Sonos's market share in the relevant market.

2. Reasonable Royalty.

If you find that Sonos is entitled to lost profits on part of Denon's sales, then Sonos is also entitled to a reasonable royalty on Denon's remaining sales. If you find that Sonos is not entitled to lost profits, then Sonos is entitled to a reasonable royalty on all of Denon's sales.

The parties agree that the royalty rates are:

- (1) for the '014 and/or the '949 patent: \$0.18 per unit; and
- (2) for the '258 patent: \$2.39 per unit.

* * *

That concludes my instructions to you on the law you are to apply. I will now make a few closing comments on the process of deliberation that you are about to begin.

IV. Jury Deliberations

1. Election of a foreman.

The first thing you should do when you retire to the jury room is to select a foreman who will be responsible for communicating with the Court as needed.

2. Verdict – Unanimous – Duty to deliberate.

You should then begin your deliberations. Your verdict on each issue must be unanimous. There will be a verdict form in the jury room waiting for you when you retire for

your deliberations. You will note that the verdict form has a series of questions to be answered during the course of your deliberations that corresponds to the jury instructions that I have just given you. When you reach a unanimous verdict as to each question on the verdict form, the foreman is to fill in the answers on the verdict form.

Please make sure to read the questions carefully, and note that some of the questions may not require answers, depending on how you answer other questions.

Do not reveal your answers to any of the questions to anyone outside of the jury until you return your verdict and are discharged. Also, if there is a divided vote on any of the issues at some point during your deliberations, you should not reveal how the vote is divided on any issue, even to me. It frequently happens that there is disagreement among the jurors when they begin deliberating. But part of your responsibility as jurors is to continue to deliberate in order to attempt to reach a unanimous verdict on each of the questions you are being asked to answer. In the course of respectful discussion among the jurors, it almost always happens that the jurors can reach a unanimous verdict even if they are divided at the outset.

When you return to the courtroom to announce your verdict, please bring the completed verdict form with you.

3. Outside communication.

During your deliberations you must not communicate with or provide any information to anyone other than your fellow jurors about this case. This includes through the use of any electronic device or media such as a smartphone or a computer, or by way of the Internet or any Internet service or text or instant messaging service, any Internet chat room, blog or website such as Facebook, LinkedIn, YouTube or Twitter. In short, you may not provide information to anyone about the case or conduct any research about the matter until I accept your verdict. I

should add that the court security officers, as well as other persons, are forbidden to communicate in any way or manner with any member of the jury on any subject touching the merits of the case. Of course, you can have contact with Ms. Nolt or other court staff as necessary to deal with any needs you may have, but you should not speak with them or anyone else about the case itself.

4. Jury's responsibility.

It is important to add the caution that nothing said in these instructions and nothing in any verdict form prepared for your convenience is meant to suggest what verdict you should return. What the verdict shall be is your sole and exclusive duty and responsibility.

Now, I expect that when you get to the jury room to begin your deliberations, you may feel a little overwhelmed. This has been a complicated case, and there will be a lot of evidence and argument to think about. But I think you will be pleasantly surprised that as you start working methodically through the case, things will begin to seem more manageable.

I hope and expect that you will listen to one another's views respectfully, even if initially you disagree on some issues. Discussing the issues from different perspectives can often help in formulating your own ideas about how particular issues should be decided.

5. Communications between court and jury during deliberations.

If you wish to see any of the exhibits, you are free to see them. All you need to do is have your foreman sign a note asking for the exhibit and to provide that note to Ms. Nolt or to the court security officer who is taking care of you during your deliberations. You can ask to see all the exhibits or you can just ask for some of them, if you like. Just let us know what you want, and we will get those exhibits for you.

If you have a question or otherwise want to communicate with me at any time, please

follow the same procedure by providing a written message or question to the court security officer, who will then bring it to me. You probably will not get a reply right away, as I will usually need to summon all the lawyers and get their input before I can respond to the question. That just means I usually cannot get back to you right away, but we will do our best to get you an answer to your question as soon as we can.

If you do have a question that is hanging you up, you are entitled to ask. I will tell you, however, that once the case is submitted to you, as it will be in a moment, we will not be able to take any additional evidence, and I may just have to tell you to rely on your collective recollection of what the evidence was and tell you that you have to decide the case based on the evidence you have heard. I think you will find in most instances, if you put your heads together, you will recall the evidence that you need to get over the problem. That's one of the reasons there are eight of you. Eight memories are better than one.

Finally, and most importantly, trust your common sense throughout. One of the strongest traditions of our justice system is the confidence we place in the sound common sense of an American jury. The parties in this case have confidence in you. And so do I. You may now retire for your deliberations.

APPENDIX

CLAIMS AT ISSUE

U.S. Patent No. 7,571,014 (“the ’014 patent”), Claim 25:

25. An apparatus for controlling a plurality of players, the apparatus comprising:

a screen;

a screen driver commanding the screen;

an input interface;

a network interface;

a memory for storing code for an application module;

a processor coupled to the memory, the input interface, the screen driver and the network interface, the processor executing the code in the memory to cause the application module and the screen driver to perform operations of:

displaying on a screen a first list showing at least available players;

displaying a zone group including players from the available players when at least two of the available players are selected to form the zone group, wherein any one of the players in the group serves as a zone group head;

synchronizing all players in the zone group in accordance with the zone group head; and

adjusting a volume meter represented by an averaged value of audio volumes of the players in the group, wherein said adjusting of the volume meter includes changing a volume of each of the group of players synchronously in accordance with an adjustment made by a user.

U.S. Patent No. 8,588,949 (“the ’949 patent”), Claim 1¹:

1. A multimedia controller including a processor, the controller configured to:

provide a user interface for a player group, wherein the player group includes a plurality of players in a local area network, and wherein each layer is an independent playback device configured to playback a multimedia output from a multimedia source;

accept via the user interface an input to facilitate formation of the player group, wherein the input to facilitate formation of the player group indicates that at least two of the plurality of players in the local area network are to be included in the player group for synchronized playback of a multimedia output from the same multimedia source;

for any individual player in the player group, accept via the user interface a player-specific input to adjust a volume of that individual player, wherein the player-specific input to adjust the volume of that individual player causes that individual player to adjust its volume; and

accept via the user interface a group-level input to adjust a volume associated with the player group, wherein the group-level input to adjust the volume associated with the player group causes each of the players in the player group to adjust its respective volume.

¹ Claim 1 was amended during reexamination before the U.S. Patent and Trademark Office. This text is the final version, after the amendments.

U.S. Patent No. 9,195,258 ("the '258 patent"), Claims 17, 21, 24²:

17. A first zone player comprising:

a network interface configured to interface the first zone player with at least a local area network (LAN);

a device clock configured to generate clock time information for the first zone player;

one or more processors; and

a tangible, non-transitory computer-readable memory having instructions stored thereon that, when executed by the one or more processors, cause the first zone player to:

receive control information from any one of a plurality of controllers over the LAN via the network interface, wherein the received control information comprises a direction for the first zone player to enter into a synchrony group with at least a second zone player;

in response to the direction, enter into the synchrony group with the second zone player, wherein in the synchrony group, the first and second zone players are configured to playback audio in synchrony based at least in part on (i) audio content, (ii) playback timing information associated with the audio content, wherein the playback timing information is generated by one of the first or second zone players, and (iii) clock time information for the one of the first or second zone players, and wherein the generated playback timing information and the clock time information are transmitted from the one of the first or second zone players to the other of the first or second zone players, wherein the first and second zone players remain independently clocked while playing back audio in synchrony; and

transmit status information to at least one of the plurality of controllers over the LAN via the network interface, wherein the status information comprises an indication of a status of the synchrony group.

21. The first zone player of claim 17, wherein the status information further comprises one or both of (a) an identification of a zone player that is operating as a master device of the synchrony group and (b) an identification of at least one zone player that is operating as a slave device of the synchrony group.

23. The first zone player of claim 17, wherein the tangible computer-readable memory further has instructions stored thereon that, when executed by the one or more processors, cause the first zone player to determine whether the first zone player is operating as a master device of the synchrony group, and

² Because claim 24 is a dependent claim that depends on claim 23, claim 23 is also included here.

wherein the instructions that cause the first zone player to transmit status information to the at least one of the plurality of controllers comprise instructions that cause the first zone player to transmit status information to the at least one of the plurality of controllers only while the first zone player is operating as the master device of the synchrony group.

24. The first zone player of claim 23, wherein the tangible computer-readable memory further has instructions stored thereon that, when executed by the one or more processors, cause the first zone player to:

receive audio content via the network interface; and

while the first zone player is operating as the master device of the synchrony group, transmit the received audio content, via the network interface, to at least one zone player that is operating as a slave device of the synchrony group.

GLOSSARY

Some of the terms in this glossary are defined in more detail in the legal instructions you are given.

Abstract: A brief summary of the technical disclosure in a patent to enable the U.S. Patent and Trademark Office and the public to determine quickly the nature and gist of the technical disclosure in the patent.

Amendment: A patent applicant's change to one or more claims or to the specification either in response to an office action taken by an Examiner or independently by the patent applicant during the patent application examination process.

Claim: Each claim of a patent is a concise, formal definition of an invention and appears at the end of the specification in a separately numbered paragraph. In concept, a patent claim marks the boundaries of the patent in the same way that a legal description in a deed specifies the boundaries of land, i.e., similar to a landowner who can prevent others from trespassing on the bounded property, the inventor can prevent others from using what is claimed. Claims may be independent or dependent. An independent claim stands alone. A dependent claim does not stand alone and refers to one or more other claims. A dependent claim incorporates whatever the other referenced claim or claims say.

Drawings: The drawings are visual representations of the claimed invention contained in a patent application and issued patent, and usually include several figures illustrating various aspects of the claimed invention.

Elements: The required parts of a patent claim, sometimes referred to as "limitations" or "requirements." A device infringes a patent if it contains each and every requirement of a patent claim.

Embodiment: A product that contains the claimed invention.

Examination: Procedure before the U.S. Patent and Trademark Office whereby an Examiner reviews the filed patent application to determine if the claimed invention is patentable.

Filing Date: Date a patent application, with all the required sections, has been submitted to the U.S. Patent and Trademark Office.

Infringement: Violation of a patent occurring when someone makes, uses, or sells a patented invention, without permission of the patent holder, within the United States during the term of the patent. Infringement may be direct, by inducement, or contributory. Direct infringement is making, using, or selling the patented invention without permission. Induced infringement is the act of intentionally causing another to directly infringe a patent. Contributory infringement is the act of offering to sell or selling an item that is a significant part of the invention, to enable the buyer to directly infringe the patent. To be a contributory infringer, one

must know that the part being offered or sold is designed specifically for infringing the patented invention and is not a common object suitable for non-infringing uses.

License: Permission to make, use, or sell a patented invention, which may be granted by a patent owner (or a prior licensee) in exchange for a fee called a "royalty" or other compensation.

Limitation: A required part of an invention set forth in a patent claim. A limitation is a requirement of the invention. The word "limitation" is often used interchangeably with the words "requirement" or "element." The phrase "claim limitation" is often used interchangeably with the phrase "claim element."

Non-obviousness: One of the requirements for securing a patent. To be valid, the subject matter of the invention must not have been obvious to a person of ordinary skill in the field at the time of the earlier of the filing date of the patent application or the date of invention.

Office Action: A written communication from the Examiner to the patent applicant in the course of the application examination process.

Patent: A patent is an exclusive right granted by the U.S. Patent and Trademark Office to an inventor to prevent others from making, using, or selling an invention for a term of 20 years from the date the patent application was filed. The patent has three parts, which are a specification, drawings and claims. The patent is granted after examination by the U.S. Patent and Trademark Office of a patent application filed by the inventor which has these parts, and this examination is called the prosecution history.

Patent Application: The initial papers filed in the United States Patent and Trademark Office (Patent Office or PTO) by an applicant. These typically include a specification, drawings and the oath (Declaration) of applicant.

Patent Examiners: Persons employed by the Patent Office having expertise in various technical areas who review (examine) patent applications to determine whether the claims of a patent application are patentable and the disclosure adequately describes the Invention.

United States Patent and Trademark Office (USPTO, or PTO, or Patent Office): An administrative branch of the U.S. Department of Commerce that is charged with overseeing and implementing the federal laws of patents and trademarks. It is responsible for examining all patent applications and issuing all patents in the United States.

Prior Art: Previously known subject matter in the field of a claimed invention for which a patent is being sought. It includes issued patents, publications, and knowledge deemed to be publicly available, such as trade skills, trade practices, and the like.

Prosecution History: The prosecution history is the complete written record of the proceedings in the PTO from the initial application to the issued patent. The prosecution history

includes the office actions taken by the PTO and the amendments to the patent application filed by the applicant during the examination process.

Reference: Any item of prior art (publication or patent) used to determine patentability.

Requirement: A required part or step of an invention set forth in a patent claim. The word “requirement” is often used interchangeably with the word “limitation.”

Royalty: A royalty is a payment made to the owner of a patent by a non-owner in exchange for rights to make, use, or sell the claimed invention.

Specification: The specification is a required part of a patent application and an issued patent. It includes a written description of the invention and the process of making and using it, together with the claims of the patent.

Written Description: That part of the specification that comes before the claims and describes the invention and the process of making and using it.